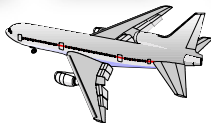


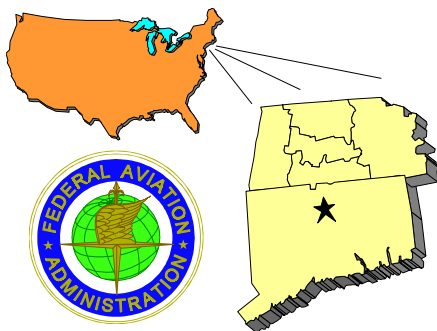
Airwaves



News from the Windsor Locks Flight Standards District Office

Spring, 2000 No. 37

Serving Connecticut and
Western Massachusetts



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Internet Sites for



[www.airsafety.org/Safety_Seminars/
Windsor-Locks_FSDO/windsor-locks_fsdo.html](http://www.airsafety.org/Safety_Seminars/Windsor-Locks_FSDO/windsor-locks_fsdo.html)

or

[www.faa.gov/region/ane/
Flight_Standards/newsltr/news.htm](http://www.faa.gov/region/ane/Flight_Standards/newsltr/news.htm)

Engine And Aircraft Manufacturer's Data Plates Up For Bid On The Web

by Susan Fournier, Aviation Safety Inspector, NE-FSDO-05, Portland, ME

Sounds great doesn't it! The web is good for one stop shopping, but beware, we are not talking about your garden variety data plates produced for amateur built aircraft. We are talking about the original manufacturers fireproof identification plates complete with builder's name, model designation, and serial number.

It appears that some of these data plates may have been removed from Type Certificated products and subsequently found their way to the auction block. If you are even thinking about purchasing one of these for use on a Type Certificated product, you must first understand what the regulations allow you to do.

Lets take a brief look at FAR Part 45, Identification and Registration Marking. Section 45.11 states in part that each person who manufactures an aircraft engine under a type or production certificate shall identify that engine by means of a fireproof plate that has the information specified in Section 45.13(a): builder's name; model designation, builder's serial number; type certificate; production certificate number; and, for aircraft engines, the established rating. All aircraft covered under Section 21.182 must be identified as listed above. You can also include propellers, prop blades, prop hubs, and balloons to this list.

The regulations clearly state that *no person may remove, change, or place identification information on these plates for any aircraft, engine, propeller or propeller blade without the approval of the FAA*. It goes on again to state that no person may remove or install any identification place without approval of the FAA *with one exception*. Persons performing maintenance may, in some cases, remove the plate when required by maintenance. If you have to remove it for maintenance reasons, the regulations allow you to

Printed Version of *Airwaves* Temporarily Suspended

Due to budget limitations this will be the last printed issue of *Airwaves* until further notice. However, a digital version will continue to be offered at two separate web site locations noted at the bottom left corner of this page. Dependent on future funding, we hope to be able to offer *Airwaves* in hard copy once again, however, the outcome is not certain. We regret any inconvenience.

Continued on page 2

reinstall it back on the product from which it came.

Plates that have been removed from wrecks sometimes find their way back into the system. Unfortunately, they can end up on engines or airframes that were rebuilt from basket cases. Think of the liability this poses for the Type Certificate holders of these products.

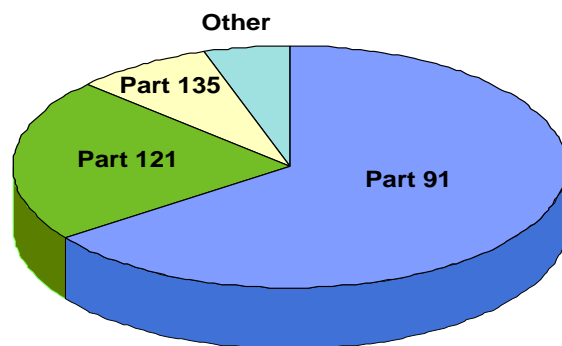
Imagine that you are the manufacturer and you have retired a serial number of an aircraft that was destroyed in an accident. The aircraft is scrapped and sold to the highest bidder. No one has accounted for the data plates and they eventually make their way back into the system. Then one day you find yourself in civil court trying to defend your company against a serialized product that was destroyed, but that product has been mysteriously resurrected in the field. I can definitely understand the manufacturers angst here.

So If you have any questions concerning this issue especially when it comes to serial numbers, give the manufacturer a call. Just remember, if you are thinking about buying one of these plates the best you can hope to use it for is a wall mounting. →

FAA Implements Runway Incursion Evaluation Program

The FAA announced a one-year program to gather information from pilots who are involved in runway incursions. A runway incursion is defined as "an occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of separation with an aircraft taking off, intending to take off, landing, or intending to land." This information would be used to examine the causes of runway incursions which would hopefully lead to a reduction in the number of these events. In implementing this policy, the FAA is offering some enforcement related incentives to pilots to encourage their participation in the information gathering effort.

Pilots (as well as mechanics who operate aircraft on the ground for maintenance purposes) will be offered the opportunity to submit to an interview by an aviation safety inspector. In turn, for those airmen who choose to participate, the FAA will not take any punitive legal action (i.e. civil penalty or certificate suspension), as long as the alleged violation was not intentional, did not involve criminal conduct, or did not result in an accident. The participating pilot may still be subject to administrative action, i.e. a letter of correction, remedial training, or a warning notice. The evaluation program has been published in the March 17 issue of the Federal Register which

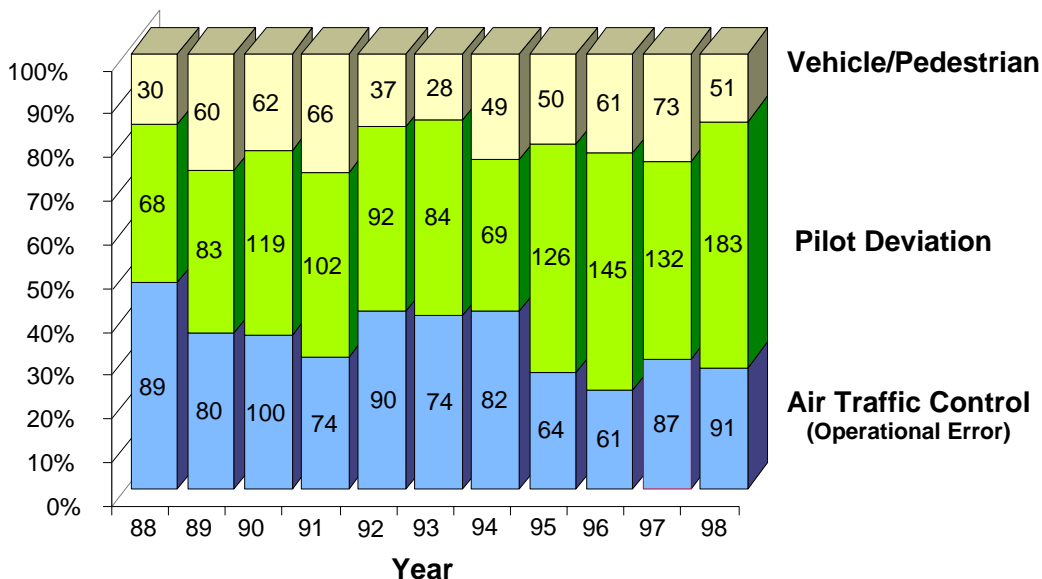


Runway Incursions by Type of Operation - CY 1998
Source: FAA Air Traffic Service

discusses the program in further detail. Further information is also available from Ross Cusimano, AFS-200, at the Air Transportation Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Ave. SW, Washington, DC 20591 (202 267-8166). One good source of information on the subject of preventing runway incursions is provided in a pamphlet published by The Aircraft Owners and Pilots Association (AOPA) entitled *Operations at Towered Airports*. This pamphlet, as well as other information, should be available at your local FSDO. →

Numbers of Runway Incursions by Source

Source: FAA Air Traffic Service



Legal Briefs: Reading Back ATC Instructions and Paying Heed to the “Yellow Tag”



The following are summaries of two legal cases that are reprinted from “The Legal Brief”, a quarterly newsletter published by the FAA New England Regional Counsel's Office in Burlington, MA. The first case (FAA v. Merrell) concerns a pilot's acceptance of an ATC instruction not meant for him, and the second case (FAA v. Svensson) concerns an airframe and powerplant rated mechanic who did not pay heed to the wording on a “yellow tag”.

FAA v. Merrell

Since the last newsletter [The Legal Brief, Fall 1999], the Board [National Transportation Safety Board], in response to a U.S. Circuit Court of Appeals decision, vacated its previous decision and reinstated the initial decision of the law judge. Thus, the Board's read-back rule, in sum, is as follows, *“An error of perception does not constitute a reasonable explanation for a deviation from a clearly transmitted clearance or instruction. Rather, inattentiveness or carelessness is presumed from the occurrence of a deviation unless, as we understand it, the misperception or mistake concerning the clearance was attributable to some factor for which the airman was not responsible such as an equipment failure.”*

A reprint from the last edition of the procedural history of the “Merrell” case follows: Recently, the U.S. Court of Appeals for the District of Columbia reversed a decision of the Board thereby reinstating an order that upheld a [FAR Section] 91.123 violation for operating an aircraft contrary to an ATC instruction. The respondent was a Northwest pilot who mistakenly thought that an ATC instruction to an American Airlines flight was intended for his aircraft. The respondent apparently transmitted his readback simultaneously with the American flight, and thus ATC neither heard the respondent's erroneous readback nor corrected it. An administrative law judge found in favor of the Agency [FAA], and upheld the violation.

The Board reversed and held that the respondent made an “error of perception.” Further, in these circumstances, “careless inattention” will not be assumed automatically when a pilot mishears an ATC instruction. The FAA petitioned the Board for reconsideration arguing that the Board was statutorily bound to defer to the Agency's interpretation that 91.123 (b) requires pilots to “listen, hear, and comply with all ATC instructions except in an emergency.”

The Board rejected the Agency's interpretation because the Agency offered “no evidence of any policy guidance written by the FAA, validly adopted or otherwise” to support its position. Ultimately, the Board stated the following rule: “If a pilot makes a mistake and mishears a clearance or ATC direction, follows all prudent procedures that would expose the mistake (e.g., read back clearance), and then acts on that mistaken understanding having heard no correction from ATC, the regulatory violation will be excused if that mistake is not shown to be a result of carelessness or purposeful failure of some sort.” [See Editor's Note below]

On appeal by the FAA, the Court of Appeals held that “the NTSB's refusal to defer to the FAA on this question of regulatory interpretation and air safety policy was in error.” In addition, the court explained that “the FAA is not required to promulgate interpretations through rulemaking or the issuance of policy guidance's, but may instead do so through litigation before the NTSB.” The court reminded the Board that “the fact that this mode of regulatory interpretation necessarily is advanced through “litigation statements” of counsel does not relieve the NTSB of its statutory obligation to accord (the FAA) due deference.” Accordingly, provided counsel's regulatory interpretations are a reasonable construction of the regulation

that it is interpreting and is neither arbitrary or capricious or otherwise not in accordance with the law, the Board must defer to the FAA.

(Editor's Note: Due to the inconsistency of the Board on this issue, the FAA published in March 1999 an interpretive rule in the Federal Register clarifying the FAA's official position on the readback rule. (See 64 FR 15912). In sum, “giving a full readback of an air traffic control transmission could result in the mitigation of sanction for regulatory violation when the air traffic controller, under the circumstances, reasonably should correct the pilots error but fails to do so. Accordingly, the FAA may take this factor into consideration in setting the amount of sanction in FAA enforcement orders. However, the simple act of giving a readback does not shift full responsibility to air traffic control and cannot insulate pilots from their primary responsibility under 14 CFR 91.123 and related regulations to listen attentively, to hear accurately, and to construe reasonably in the first instance.”

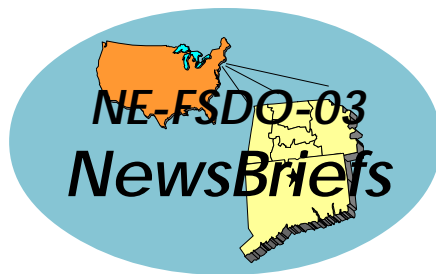
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Airwaves is published quarterly by the Federal Aviation Administration, Windsor Locks Flight Standards District Office (NE-FSDO-03), Building 85-214, Bradley Int'l Airport, Windsor Locks, CT 06096-1009. Phone 860 654-1000, Fax 860 654-1009. Please direct your comments or questions to Jim Gebryel at 860 654-1010 or via electronic mail (e-mail) at james.gebryel@faa.gov. You can call, write, fax, or use e-mail to add your name to our mailing list. An electronic copy of **Airwaves** may be downloaded from: www.faa.gov/region/ane/Flight_Standards/newsltr/news.htm.

FAA v. Svensson

The Board reversed the ALJ's [Administrative Law Judge] decision and held that Respondent violated [FAR Section] 43.13. The Board however, refused to impose any sanction. The Respondent, an A&P, returned to service a Lycoming engine, certifying that he had complied with all service bulletins. Because of corrosion pitting in the crankshaft, however, the engine was not in compliance with a Lycoming service bulletin or its engine overhaul manual. The engine had been sent previously to another repair facility for servicing and was returned to Respondent with a 'yellow tag' and handwritten note 'See Work Order #84968 for details.' Under standard industry practices, a 'yellow tag' denotes an aircraft part as serviceable. In actuality, the other repair facility had mislabeled the engine, which Respondent would have discovered had he referred to the actual 'work order.' The Board held that the ALJ erred when he found that Respondent had 'reasonably relied' upon the other repair facility's mislabeling. The Board stated, that "by failing to review the documentation referenced on the yellow tag, Respondent . . . did not exercise the care expected of a holder of a mechanic certificate to ensure that all relevant requirements . . . had been met.

Notwithstanding our judgment that Respondent's conduct fell short of regulatory expectation, we are persuaded that he should not be sanctioned because his lapse, albeit deserving of official censure, was largely the predictable outcome of the flawed performance of others involved in the maintenance of the aircraft whose errors, misjudgments or, possibly, misconduct may have obscured the necessity for a personal review of the records pertaining to critical maintenance performed by another repair facility."



Copies of FAA Bulletins, Advisory Circular (AC) Checklist, notices of rule changes, and other Flight Standards information, can be downloaded from the Internet world wide web at www.faa.gov/avr/afshome.htm. You may also contact your local FSDO for a copy of a particular bulletin. AC's may be ordered from, the Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954 (phone orders: 202 512-1800; fax: 202 512-2250). Master Minimum Equipment Lists (MMEL) may be downloaded from the internet at www.opspecs.com or you can request the specific MMEL from your local FSDO.

RVSM in Pacific Authorized

Reduced Vertical Separation Minimum (RVSM) operations have been implemented in the Pacific Oceanic Flight Information Regions (FIR) including the NOPAC (North Pacific) and CEP (Central East Pacific) Route Systems on February 24, 2000 between flight levels (FL) 290 and 390 inclusive. Reduced Navigational Performance (RNP-10) was also implemented on February 24, 2000 in the CEP Route System (the route system between the west coast of the United States and Hawaii). RNP-10 was

implemented on the NOPAC route system in April 1998.

Reduced Vertical Separation Minimum (RVSM) programs enable 1,000-foot vertical separation to be applied between aircraft above FL 290. Section 91.706 of the Federal Aviation Regulations (FAR), *Operation Within Airspace Designed as RVSM Airspace*, and FAR Part 91, Appendix G, *Operations in RVSM Airspace*, provide regulatory policy for RVSM programs. Joint Flight Standards Handbook Bulletins HBA 99-11A and HBGA 99-17A, *Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where 1,000 Foot Vertical Separation is Applied*, provides guidance for the approval of aircraft and operators for RVSM operations. Part 121, 135, and 125 operators will be approved for RVSM through operations specifications (OpSpecs), paragraphs B037 and B038. Part 91 operators will receive authority through a letter of authorization issued by their local FSDO. If a Part 91 operator already possesses RVSM approval, they need not reapply to add operations in

JAA Renewal Reminder

Just a quick reminder to check the expiration date of your JAA (Joint Aviation Authority) Certificate. Several repair stations in this district will be coming up for renewal of their JAA certificate in August 2000. If you are due for renewal in August, this deadline will be coming soon, so be prepared. Please submit two (2) copies of the JAA Form 16 to this office at least 60 days in advance. Please submit the renewal fee to the address on the back side (page 2) of that form at least 30 days in advance. Nobody likes surprises, so keep the lines of communications open. Resources are thin, so please be patient with the process and give us as much lead time as possible. You may be requested to renew early or late to align the renewal with your PMI's work program. If you need a blank JAA Form 16, please contact your assigned principal inspector.

NOPAC or CEP.

RNP-10 enables a 50-nautical mile lateral separation to be applied between aircraft operating in oceanic/remote areas. Guidance for approval of aircraft and operators to operate in areas or on routes designated as RNP-10 airspace are contained in FAA Order 8400.12A,

Required Navigation Performance 10 (RNP-10) Operational Approval. Joint bulletins HBAW 98-07A, HBAT 98-16A and HBGA 98-03A, *Approval of Aircraft and Operators for Flight in Airspace Where Required Navigation Performance 10 (RNP-10) is Applied*. Part 121, 135, and 125 operators can receive approval for RNP-10 through OpSpecs paragraphs B036 and B038. Part 91 operators will receive authority through a letter of authorization. As is the case of RVSM approval, if the Part 91 operator already has RNP-10 approval, they need not reapply to add NOPAC or CEP.

For further information, please refer to bulletin HBAT 00-01 and contact your assigned principal inspector or local FSDO. Please note the sidebar on this page for information on a seminar covering these topics and others on special use airspace operations.

Caution on Rotorcraft Data Plates

The FAA recently identified several instances in which persons installed data plates on rotorcraft that did not meet approved type design criteria. Although applications submitted to the FAA by these persons indicated that these aircraft met the FAA type design, investigation revealed they were military surplus aircraft sold to the public. These particular aircraft are potentially eligible for special, restricted category certification only. Such misrepresentation seriously misleads the consumer regarding the quality, safety, and reliability of these rotorcraft.

Some military rotorcraft may appear to be identical to similar FAA type-certificated models. However, there are important differences in design, manufacturing processes, materials, and how the military and civil versions were operated and maintained. Often, it is difficult to see the difference between military and civil models in order to substantiate whether the rotorcraft meets FAA type design without having access to the adequate data. Type Certificate Data Sheets (TCDS) may list both, civil model and military model rotorcraft. Some examples are: BHT-206A1 (OH-58A), HU-369A (OH-6A), S-61A (U.S. Navy SH-3A, and HSS-2). These TCDS list eligible serial numbers. (An eligible serial number only means that a specific serial numbered rotorcraft is eligible for type certification. It does not establish that a rotorcraft with a listed serial number is already type certificated). FAA inspectors are instructed to issue

standard airworthiness certificates for rotorcraft, only after a detailed inspection ensures that the helicopter meets its FAA-approved type design and is not of military origin.

Please refer to bulletin HBAW 00-03, or contact your local FSDO for further information.

New Guidance for Infrared Deicing

The FAA has published guidance for approving infrared technology for use in an operator's ground de-ice/anti-ice program. With the high costs associated with the use of typical deicing fluids, infrared technology is becoming a cost effective alternative and the FAA has encouraged its development. However, to ensure that infrared de-icing systems are used with the highest degree of safety, the

Seminar on Special Use Airspace Scheduled

Some of you may have already received a letter inviting you to a seminar covering *"Operations and Aircraft Requirements in Special Use Airspace"*. The seminar, scheduled for May 17, 2000, is designed especially for Part 121, 125, 135, and Part 91 operators who operate in special use airspace or are contemplating such operations. Subjects will include operations in the special use airspace of the North Atlantic, Pacific, the West Atlantic Route System, Gulf of Mexico, and the Caribbean. It will also include a discussion of the aircraft and equipment requirements when operating in these areas. Also on the agenda will be a discussion about operations in Europe and in areas approved for Reduced Vertical Separation Minimums (RVSM). Presenters will include Dave Maloy, a FAA Navigation Specialist, who is well versed in special use airspace operations; a representative from ARINC, who will discuss ARINC operations; and representatives from our office who will discuss aircraft and equipment requirements and the approval process for operations in special use airspace. There will be ample opportunity for questions and answers.

The seminar will take place at the Connecticut Air National Guard at Bradley International Airport in Windsor Locks, CT and will start promptly at 9:00 a.m. - 12:30 p.m. (registration will start at 8:30 a.m. and refreshments will be available). Please contact Cindi at 860 654-1051 to make your reservations. *This is a one of a kind seminar and is not likely to occur too often - so try not to miss out!*

FAA developed general safety criteria for operators and inspectors to use when evaluating and approving such systems. This guidance is published in joint bulletin FSAT 00-05 and FSAW 00-02. In general, the operator who wishes to use an infrared de-icing facility should ensure that the system used by that facility meets the criteria presented in this bulletin or provides an alternative, acceptable means of assuring the operational safety of the de-icing facility. Although this guidance is primarily directed toward Part 121, 135, and Part 125 operators and subsequent approval by its assigned principal inspectors, it can be used by Part 91 operators as well except FAA approval is unnecessary. Once an operator determines that the infrared de-icing system meets the criteria, the operator should present its findings to their assigned principal inspectors for review (does not apply to Part 91 operators). Once the FAA determines that the infrared de-icing system meets all criteria, then the system may become part of the operator's ground de-icing/ anti-icing program. For further information, please refer to the above bulletin, or contact your assigned principal inspectors or your local FSDO.

ASOS Ice Accretion Reports

Guidance has been provided in bulletin FSAT 00-04 for the use of freezing rain sensors installed as part of an Automated Surface Observing System (ASOS). Thanks to the National Weather Service (NWS) the sensor is now capable of accurately measuring and reporting the amount of surface ice accretion at a specific point over a given time period. The NWS plans to implement the new ice accretion algorithm for public forecast and warning



purposes starting this year. However, the FAA cautions that the amount of ice accretion can vary widely over relatively small distances on and around an airport and the use of this information should be limited to a general awareness that freezing rain may be present. It should not be solely relied upon to make "go" or "no go" tactical decisions or aircraft ground de-icing decisions. The ASOS Freezing Rain Sensor will generate information that will be included in the remarks section of an Aviation Routine Weather Report (METAR) or Special Report (SPECI). This icing information will only be included on a METAR/SPECI when icing is detected, and will be located in the remarks section (RMK) of the report. All ice accretion amounts will be reported to the nearest one-hundredth of an inch (0.01 in.). An example of a 1, 3, and 6-hour ice accretion remark would be: "I1010 I3015 I6022." This translates

to 0.10 inches of ice in the last hour, 0.15 inches of ice in the last 3 hours, and 0.22 inches of ice in the last 6 hours. Please see bulletin FSAT 00-04 for further information.

FAA Publishes Guidance on Digital Communications

The FAA has published guidance for operational approval to use digital communications systems, including data link and voice communications for air traffic services (ATS) in operations under FAR Part 121, 125, 129, and 135. The information can also be applied to Part 91 operations. The guidance, which is contained in Advisory Circular (AC) 120-70, describes the approval process, an acceptable means for training, maintenance provisions, and operational policies for use. Digital communications systems

New Terrain Awareness Warning System Will Be Required

The FAA has published a final rule in the Federal Register that will require the installation of a terrain awareness warning system (TAWS) for all turbine-powered airplanes with six or more passenger seats (excluding pilot and co-pilot seats). The new rule, which becomes effective on March 29, 2001, will require an approved TAWS installed in all the above aircraft by March 29, 2005, for all aircraft manufactured on or before March 29, 2002. Some exceptions will apply. For example, the equipment would not be required for aircraft when they are used for parachuting operations within a 50 mile radius of the airport where operations began, firefighting operations, and certain flights incidental to the aerial application of chemicals. The FAA believes that the installation of TAWS would significantly lower the number of controlled flight into terrain (CFIT) accidents or incidents. Aircraft operated under Part 91, 125, or 135 (with 6-9 passenger seats) would be allowed to have TAWS equipment that meets less stringent, and also less expensive, requirements than other turbine-powered aircraft operated under Part 135 (10 or more passenger seats) and Part 121. An electronic copy of the final rule and an indepth discussion can be downloaded from the internet at the FAA website, www.faa.gov/avr/arm/nprm/nprm.htm or by submitting a request to the FAA, Office of Rulemaking, ARM-1, 800 Independence Ave. SW, Washington, DC 20591, or by calling 202 267-9680. Please specify Docket No. 29312 when ordering.

can be used to transmit air traffic instructions via a data link in lieu of, or to supplement, voice communications. Please refer to the above AC and/or contact your assigned principal inspector for further information.

Special Procedures for Turboprop Icing

As a result of and NTSB (National Transportation Safety Board) recommendation, the FAA is requesting that all operators of turbopropeller powered aircraft exercise caution when operating in icing conditions. In its recommendation the NTSB determined that some

*“... autopilots
may have a
tendency to
mask...changing
aerodynamics ...
in icing
conditions...”*

autopilots may have a tendency to mask an airplane's changing aerodynamics during flight in icing conditions. In some icing conditions, undetected by the flightcrew, an autopilot may reach its command limits and disconnect abruptly. The airplane may then enter an unusual attitude from which recovery is very difficult or impossible before impact with the ground. Although the NTSB recommended that all operators of turboprop aircraft disconnect the autopilot when the

anti-ice systems are activated, a working group organized by the FAA believes that this action is too broad and recommended alternative and less drastic actions.

The working group suggested some in-flight icing procedures that pilots should follow when they are not expressly noted otherwise in the manual used by the pilot. Very briefly, these procedures include disconnecting the autopilot every few minutes if icing conditions are severe to check the aircraft handling characteris-

tics; keeping an additional margin of speed; and closely monitoring engine power settings during icing conditions.

All operators are encouraged to address this issue as soon as practical. Part 121 and 135 air carriers in particular, should incorporate these measures in their approved training programs and contact their assigned principal inspector. Please refer to bulletin FSAT 00-02 for further details. ➔



Pilots !! Mechanics !!

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Dr. Norma Granville of the Famous GB Air Racer Family
Phillip Lockwood (Rotax Maintenance)
Dan Johnson (Ballistic Recovery Systems), *and more...*

Where:
This year's event will be conducted at Pratt & Whitney's Customer Training Center and Hangars, East Hartford, CT
Free Transportation for fly-in's from Million Air at Brainard Airport

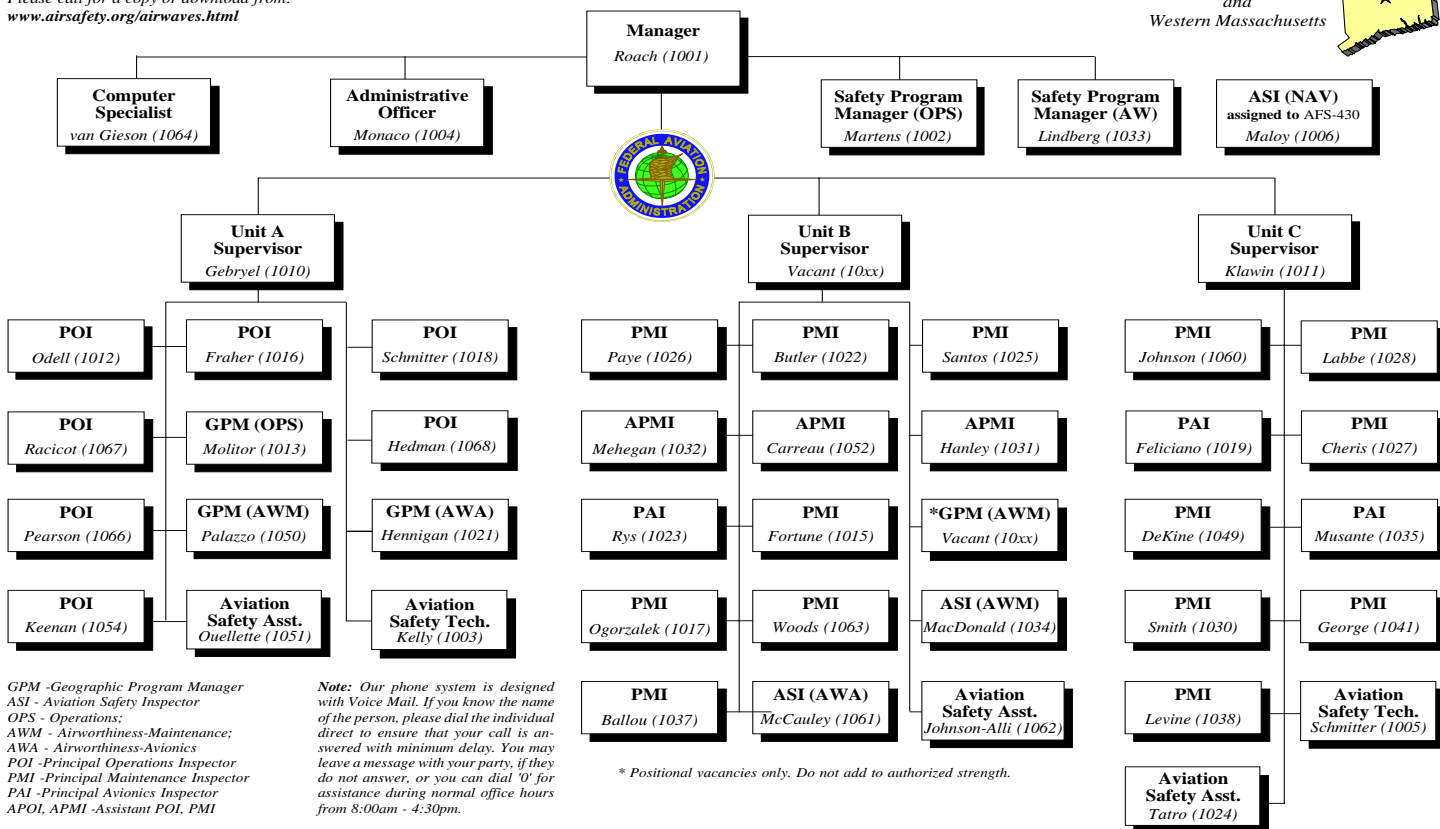
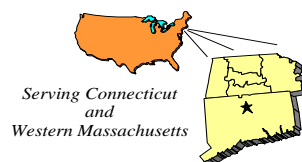
Directions:
Take Interstate I-84 to East Hartford, CT
Use Exit 58, Cross Silver Lane into Pratt & Whitney Complex
Parking is 1/2 mile on the left

Door Prizes!

Contact:
Bob Martens at 860 654-1002
or Pete Lindberg at 860 654-1033

Federal Aviation Administration Windsor Locks Flight Standards District Office

Telephone 860 654-1000 or 860 654-xxxx for the named individual (Fax 860 654-1009)



Revised 4/2000



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